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How and when do presidents influence the duration of coalition bargaining in semi-presidential systems?

ABSTRACT

How and when do presidents influence the government formation process in semi-presidential systems? Presidents have both a formal role and vested interest in the formation of the cabinet yet their influence has been overlooked in studies of the duration of government formation. In this article, the author argues that the president's influence over government formation can be explained by their perceived legitimacy to act in the bargaining process and their partisanship. In this first case, it is argued that the legitimacy to act derives from a president's constitutional powers and more powerful presidents simplify cabinet bargaining, leading to shorter government formation periods. In the second case, it is proposed that presidents and their parties have overlapping preferences. Therefore, when the president's party holds greater bargaining power in government formation negotiations, the bargaining process is less uncertain and less complex. Thus, government formation processes will be shorter. Using survival models and data from 26 European democracies, both propositions are confirmed by the analysis. The results enhance our understanding of the dynamics of cabinet bargaining processes and contribute to the wider study of semi-presidentialism and executive-legislative relations. One broader implication of these results is that the president's party affiliation is an important motivation for them as political actors, this contrasts with some previous studies which conceive of presidents as non-partisan actors.

KEY WORDS: coalition bargaining; government formation; bargaining duration; semi-presidentialism

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The duration of the government formation process has potentially far-reaching consequences for the capacity of a state to address pressing policy concerns. No democratic state is ever without a government, but during bargaining over government formation a caretaker administration usually presides and by convention, this cabinet will not take controversial or partisan decisions since it is seen as lacking a mandate to do so. Extended periods of coalition bargaining can have significant consequences for a state. The governing crisis in Belgium between 2010 and 2011, which led to a government formation process that lasted 541 days, resulted in the legislature's failure to pass a budget and, as consequently, an official rebuke from the European Commission.¹ Furthermore, financial markets lost confidence in government bonds and interest rates rose markedly (Hooghe, 2012). It is therefore desirable that negotiations are concluded sooner rather than later.

In recent years, several other European countries have experienced difficult periods of government formation. Following the December 2015 general election in Spain, coalition negotiations lasted more than four months with no resolution, resulting in new elections being called. These new elections did little to alter the situation but a new government eventually took office after four months of negotiations following the Socialists' (PSOE) concession to tacitly support a minority Popular Party (PP) administration. By contrast, in October 2015 the Portuguese general election resulted in a fragmented legislature and fraught coalition negotiations yet government formation lasted just 53 days.² So, why did government formation conclude much more rapidly in the Portuguese case?

Part of the answer may lie in the constitutional arrangements of the respective states. Both Spain and Belgium are parliamentary systems while Portugal is semi-presidential. Although government formation can be prolonged in both parliamentary and semi-presidential systems, extended bargaining periods are more common in parliamentary systems (see Figure 2). In this

article, I argue that the duration of government formation in semi-presidential systems will be shorter due to the president's capacity and willingness to influence the process.

Despite its importance, the study of the duration of government formation is in its infancy; just five articles have examined the causes of delays in coalition bargaining, all of which focus on either the complexity or uncertainty of the bargaining environment (De Winter & Dumont, 2008; Diermeier & van Roozendaal, 1998; Ecker & Meyer, 2015; Golder, 2010; Martin & Vanberg, 2003). While the results of previous research in this field are inconsistent, none provide a systematic account of the role of extra-parliamentary actors in the government formation process, specifically, the influence of presidents in semi-presidential systems. As actors with a constitutionally designated role in the government formation process, and a more fuzzily-defined role in national politics more generally, presidents have the potential to influence the duration of coalition bargaining. The question is how and under which circumstances is this influence likely to be exercised? In this article, I set out a new theoretical contribution to the study of bargaining duration and contribute to the broader understanding of the power and influence of the president in semi-presidential systems. I argue that the president's influence over the government formation process depends on two key factors: first, the president's perceived legitimacy to act during coalition bargaining and second, the president's partisanship.

In the first case, the electoral mandate provided by direct elections conveys a degree of legitimacy on the president to intervene in government formation compared to either indirectly-elected presidents or monarchs in parliamentary systems (Duverger, 1980). But possession of an electoral mandate is not sufficient to explain the president's influence. Rather, the president's legitimacy to act is conditional on the scale and scope of their constitutionally mandated powers which grant the office holder greater authority. This legitimacy to act allows the president to take greater initiative in the government formation process and in the post-

formation legislative process. The effect of this is to reduce the number of potential governing proposals that are acceptable to politically relevant actors in the bargaining process. In the second case, assuming that the preferences of the president and their party overlap and the president has an interest in their party's success (Grossman & Sauger, 2009), government formation is less complex when the president's party in the legislature holds a stronger bargaining position. This means that the president's party is pivotal to more potential governing proposals, and with all parties seeking to avoid potentially conflict-ridden periods of cohabitation, once more the range of acceptable governing proposals is reduced when the president's party has greater bargaining power. Therefore, the duration of cabinet formation will be shorter.

I test this theory using data from 26 European countries, 12 of which are classified as semi-presidential under Elgie's (1999) criteria. In doing so, I make three contributions to existing research; first, I provide a new theoretical explanation of presidential influence in the government formation process. Second, I demonstrate empirically the conditions under which presidents wield greater influence during government formation negotiations. Finally, the results presented in this paper contribute to the broader understanding of semi-presidential government by outlining how president's use their formal powers to influence political outcomes. This paper also challenges the notion that presidents act in a non-partisan manner in semi-presidential systems which is often assumed in studies of semi-presidentialism (e.g. Amorim Neto & Strøm, 2006; Schleiter & Morgan-Jones, 2010).

PRESIDENTS AND THE DURATION OF GOVERNMENT FORMATION

The literature on the duration of government formation has primarily concentrated on the complexity and uncertainty of the bargaining process. Uncertainty in coalition bargaining is the lack of knowledge over the policy and office preferences of actors who need to agree to the

formation of the government. Complexity refers to the number of potential government proposals, which is effected by factors such as the number of parties in the legislature (Golder, 2010). Diermeier and van Roozendaal (1998) find evidence that uncertainty caused by asymmetric information increases the duration of the government formation process while arguing that the complexity of the bargaining environment will have little effect. Martin and Vanberg (2003) and De Winter and Dumont (2008) disagree, demonstrating empirically that factors which increase the complexity of the bargaining environment (such as the number of parties and ideological polarization) also delay government formation. Golder (2010) shows that uncertainty always delays government formation but complexity only influences the duration of coalition negotiations when information uncertainty is high. Finally, Ecker and Meyer (2015) find few statistically significant effects in their models of the duration of coalition bargaining but conclude that these models work better in Western Europe than in the newer democracies of Eastern Europe. Institutions and rules – such as positive parliamentarism – have also been examined in the context of the effect that they have on the uncertainty or complexity of the bargaining environment. But presidents are both actors and holders of an institutional office and therefore, their role in government formation is one governed by the motivations of the actor and their capability (or willingness) to wield institutional powers. By considering both motivations and capability together, it is possible to conceive of the president's impact on the duration of government formation more concretely.

Empirically, it has been observed that the duration of government formation is shorter in semi-presidential regimes but so far there has been no systematic account of why this may be the case – the authors of that study include semi-presidentialism as a control variable and note only the direction of the relationship (De Winter & Dumont, 2008). The more theoretically and substantively interesting questions are when and why are presidents influential? Answering these questions helps to inform our knowledge of coalition bargaining but also our understanding of the ability of presidents to influence legislatures more generally.

In theorizing the president's role, it is helpful to return to the concepts of uncertainty and complexity both of which can be influenced by presidents. Presidents are an additional politically relevant actor that is involved in government formation and their preferences may not always be clear; some scholars contend that presidents act in the national interest while others argue that presidents are partisan actors (Amorim Neto & Strøm, 2006; Grossman & Sauger, 2009; Samuels & Shugart, 2010; Tavits, 2008). However, if we begin from the premise that presidents have two basic motivations that are contingent on one another, (1) to remain in office and (2) to fulfil the policy preferences of their voters (Schleiter & Morgan-Jones, 2010; Schleiter & Morgan-Jones, 2009b), then we can build a theory of presidential activism in coalition bargaining. To pre-empt the ensuing discussion, it is my contention that greater constitutional powers reduce complexity and the president's partisanship reduces both uncertainty and complexity in the government formation process. Thus, leading to shorter government formation processes.

Presidential powers, the legitimacy to act, and complexity

A crucial part of a president's legitimacy to intervene in government formation derives from their electoral mandate (Duverger, 1980; Elgie, 1999). The president can claim direct authority from the electorate to act as a chief executive and interpret this as the legitimacy to influence cabinet formation. For example, in 2013, the Czech president Miloš Zeman refused to appoint the right-wing ruling coalition's nominated candidate to replace outgoing prime minister Petr Nečas despite the coalition's ability to command a parliamentary majority.³ No previous Czech president had refused to appoint a candidate for prime minister that held majority support in the legislature but until 2013, Czech presidents were not directly elected. Zeman was undoubtedly emboldened to act by his electoral mandate, stating that more people voted for him than any party (The Economist, 2013). In what follows, it is assumed that indirectly

presidents lack the legitimacy to intervene in the political process in such a way. All hypotheses are therefore dependent on this distinction and apply only to directly-elected presidents.

However, the fact of being directly elected is insufficient to explain a president's influence over government formation. The scenario in the Czech Republic could not have arisen in Bulgaria or Ireland where presidents are constitutionally proscribed from rejecting a proposed candidate for prime minister. Therefore, the president's legitimacy to act also partly derives from their constitutional powers which enhances their authority in the eyes of both voters and other political actors in the system.

Researchers whose focus is regime classification have sought to measure the constitutional powers of presidents in semi-presidential systems. The most commonly-used of these classifications is that of Shugart and Carey (1992) which was subsequently revised by Metcalf (2000). Under this schema, each constitutional power is rated on a scale of 0 to 4 then summed to produce an aggregate score of presidential powers in each country. Regarding the specific power of cabinet formation, a score of zero indicates that the president cannot appoint a prime minister or any other ministers unless they are recommended by the legislature. A score of 4 is given when the president can appoint a cabinet without the need for confirmation or investiture by the legislature. The most commonly-awarded score in empirical analyses is 1 which signifies that a president can name a prime minister who requires investiture and who can then name other ministers (Shugart & Carey, 1992). Other powers included in these schemas can also be of relevance to the government formation process, such as the power to dissolve the legislature or directly appoint ministers.⁴

Constitutional provisions represent the formal powers available to a president but they do not reveal the extent of the president's potential influence over the government formation process. Some presidents are more willing and able to use these powers or interpret their scope more

widely. For example, the period between 1991 and 1995 in Poland witnessed a great deal of government instability and a number of difficult government formation processes owing largely to president Lech Wałęsa's ongoing disputes with a number of the parties that emerged from the break-up of the Solidarity movement and his willingness to interpret constitutional provisions in a way that privileged his office (Millard, 2000). Wałęsa was partially emboldened to do this by his personal stature as much as the powers of his office; he was the leader of the movement that overthrew the communist regime so how could anybody question his democratic credentials? The Finnish president, Urho Kekkonen was willing to go even further, exercising almost direct control over the appointment of prime ministers, the formation of coalitions, and the dismissal of governments (Nousiainen, 2001). Presidential influence can, then, extend beyond the scope of their constitutional powers. By contrast, Austrian presidents have extensive formal powers over government formation but by convention they are rarely exercised, leading Samuels and Shugart (2010) to label Austria as a "parliamentarized" semi-presidential regime.

Referring specifically to the coalition bargaining process, it is expected that presidents with greater powers will reduce the complexity of government formation. This is achieved by placing limits on what constitutes an acceptable governing proposal to politically relevant actors in the bargaining process. These limits can derive from either the president's legislative or non-legislative powers (Metcalf, 2000; Shugart & Carey, 1992). Non-legislative powers allow the president to directly intervene in coalition formation by, for example, being able to appoint the formateur. The formateur then has an agenda-setting role which can bias the outcome of negotiations in the president's favor (Baron & Ferejohn, 1989). However, this power may be constrained by conventions, such as the requirement to give the leader of the largest party the first attempt to form a government. Alternatively, Schleiter and Morgan-Jones (2009a) have shown that where presidents have the power to dissolve the legislature, the risk of cabinet termination is higher. It could, then, be expected that in systems where the president has the

power to dismiss the cabinet or dissolve the legislature, parties with rational foresight have an incentive to form a government more in line with the president's preferences in order to reduce the prospect of cabinet instability (Protsyk, 2006). Whenever a president has greater powers to directly intervene in either cabinet formation or dismissal, the range of acceptable governments will be reduced to the set that will not induce the president to use these powers. As such, bargaining complexity will be lower.

Presidents with stronger legislative powers will also reduce the complexity of coalition bargaining. To understand how, it must be recalled that presidents in semi-presidential systems are co-executive actors; any cabinet that forms will govern alongside the president and both the president and cabinet will attempt to satisfy the policy preferences of their voters to enhance their chances of being re-elected. Parties, as actors with rational foresight, understand this and will factor it into their calculations of what constitutes an acceptable governing offer. Presidents with greater legislative powers have the ability to veto or delay legislation in an attempt to push policy towards their own preferences as was the case in France during the period of cohabitation under president François Mitterand between 1986 and 1988 (Elgie & McMenamin, 2011; Köker, 2014). Presidents can also be generally disruptive to the government by interpreting their legislative powers as the ability to influence policy outputs as is the case in France (Grossman & Sauger, 2009; Metcalf, 2000). More extensive legislative powers are therefore likely to lead to greater conflict between the president and government if the cabinet is not considered to be acceptable to the president (Protsyk, 2005a, 2006; Roper, 2002). In that situation, the costs of taking office for parties can outweigh the benefits as the potential to fulfil their legislative agenda is limited which will have consequences at the ballot box.

In sum, when the president has greater powers, the set of acceptable governing proposals is narrower. The government that forms must be one that is more likely to be stable and able to implement its legislative agenda. This limits the range of acceptable governments to those that

the president will not seek to prevent forming in the first place, or to directly destabilise, and those whose legislative agenda the president will not try to impede. Conversely, when presidents are weaker, parties have less incentive to consider their potential use of either legislative or non-legislative powers. Parties would also have a greater incentive to resist any presidential interference in the government formation process as they know that even if formation is delayed by this, the president will have little influence once the cabinet takes office due to their limited powers. The duration of coalition bargaining is therefore more likely to be influenced by factors other than the president in such circumstances. The actual constellation of presidential powers in each system varies with some holding greater legislative powers and some greater non-legislative powers. As the foregoing discussion shows, the net result will be similar for presidents with stronger legislative or non-legislative powers, meaning that the two are substitutable. They are also additive, as specified by the construction of the Shugart and Carey index (Shugart & Carey, 1992); presidents that hold both extensive legislative and non-legislative powers should be more influential than those that hold only one or the other. Therefore:

Hypothesis 1 (H1): The duration of government formation will be shorter in semi-presidential systems in which presidents have greater constitutional powers.

Partisanship, complexity, and uncertainty

Scholarship on presidential influence is often divided on how to characterize the president's partisan preferences. Research into formateur and prime minister selection has found that presidents tend to appoint candidates who are ideologically proximate to them (Carroll & Cox, 2011; Glasgow et al., 2011; Kang, 2009; Protsyk, 2005b). However, conventions surrounding formateur selection usually prevent them from exercising free choice in appointing a candidate. Studies of ministerial appointments offer a different conceptualization of the partisan

motivations of the president. They use the share of non-partisan ministers as the indicator of presidential influence, thus explicitly advancing the view that the president is above party politics and acts, instead, in the national interest or their own self-interest (Amorim Neto & Strøm, 2006; Schleiter & Morgan-Jones, 2010; Tavits, 2008). This rests on the belief that the interests of the president and either the legislature, or a single political party, are not congruent. It is argued that the presidential mandate is national and they need to build electoral coalitions across party lines to win office so they see themselves as representatives of the mass of the people rather than a narrow party base (Tavits, 2008). The mandate of legislative parties is usually much more localized to an electoral district and parties can afford to appeal to a less diverse electorate and still perform well at the ballot box (Samuels & Shugart, 2010). As Schleiter and Morgan Jones (2010) put it, the preferences of the median voter of the president's national constituency are likely to differ from those of the median voter in the constituency of the president's party.

Samuels and Shugart (2010) and Grossman and Sauger (2009), have offered an alternative perspective. They argue that there is an increasing overlap between the preferences of presidents and their parties in the legislature, partly attributable to the "presidentialization" of political parties. This entails parties delegating authority to set electoral and governing strategies to their presidential candidates (Samuels & Shugart, 2010). Grossman and Sauger (2009) show that this results in presidents behaving in a partisan manner and intervening more frequently in policy matters. It enables presidents to become "super prime ministers" at the cost of their ability to act as neutral arbiters of the constitution.

There are substantial incentives for a president to act in a partisan fashion, particularly when parties are presidentialized and the presidential candidate can set the agenda for the party. For one, the president requires party resources to compete in elections. Funds and party members to provide local-level campaigning teams are usually in short supply to independent candidates

but parties have greater access to both. Although some independent candidates have won elections in semi-presidential systems, most have done so with the explicit support of a party; in fact, many presidents, by convention, become nominally independent upon assuming office to maintain the façade of a “representative of the nation”. A further incentive is provided by the enhanced support that a legislative base provides to a president. This legislative base increases the likelihood that a president can fulfil the policy preferences of their voters by giving them greater influence over legislative processes. The legislative party can also use administrative resources which are necessary to draft or oppose legislation but which are sometimes unavailable to presidents, as is the case in France (Grossman & Sauger, 2009).

The presidentialization of parties has logical implications for the duration of government formation. If the preferences of presidents and their parties overlap then it can reduce overall uncertainty in the bargaining environment as other actors can infer the president’s position from those of their party, and vice versa. What constitutes an acceptable proposal for one is also acceptable to the other. But while the preferences of the president and their party may be overlapping, this simplifies coalition bargaining only to a limited degree. The bargaining environment may still be highly fragmented, polarized, or complex in other ways.

If we build on the presidentialization thesis and assume presidents will prefer to see their party succeed, it can be argued that a president is more likely to see a governing proposal that includes their party as acceptable than an alternative that excludes their party. Indeed, all rationally foresighted parties in the system are also likely to concede that such a proposal is more sustainable if it avoids a period of cohabitation that is likely to be conflictual (Protsyk, 2006). Cohabitation is defined as the scenario in which the president and prime minister are from different parties and the president’s party is not in the cabinet (Elgie, 2010; Elgie & McMenamin, 2011; Samuels & Shugart, 2010). Periods of cohabitation, such as 1986-1988, 1993-1995, and 1997-2002 in France and 1986-1995 in Portugal, are generally unstable as they

increase the potential for conflict over the direction of government policy as well as the exercise of constitutional powers (Amorim Neto & Lobo, 2009; Grossman & Sauger, 2009; Lazardeux, 2015).⁵ Even in systems where presidents have weak legislative powers, they can still effectively impede the cabinet's legislative agenda. Amorim Neto and Lobo (2009) have shown that Portuguese presidents have used 'open presidencies' as a tactic to set the legislative agenda by building public support for their policies.⁶ Pre-empting the type of conflict that arises from cohabitation is therefore an important consideration during government formation.

It follows that the complexity of government formation will be lower when the president's party holds a more powerful bargaining position and is therefore more likely to be included in the cabinet. The president and their party are politically relevant actors in the bargaining process, with the president possessing the potential to be disruptive in both the government formation process and post-formation governance. Other actors in the bargaining process know that an acceptable proposal is likely to be one that satisfies the preferences of the president and their party. Therefore, when the president's party is a member of a greater proportion of potential cabinets the range of acceptable governing proposals is easily identifiable and the duration of bargaining will be shorter. Conversely, when the bargaining power of the president's party is lower there are a greater proportion of minimal winning coalitions that do not contain the president's party. Therefore, it is less likely that a viable cabinet containing the president's party can be found. This, in turn, raises overall bargaining complexity as the president still must be satisfied with the governing proposal but has less incentive to accept a cabinet that does not contain their own party.

Hypothesis 2 (H2): In semi-presidential systems, the duration of government formation will be shorter as the bargaining power of the president's party in the legislature increases.

The hypotheses specified in this article assess two different aspects of presidential influence. First, presidential powers are a relatively static conduit for presidential influence on the bargaining process. While there have been changes in the constitutional powers of presidents over time, such as in Finland in 2000 and Poland in 1997, these are rare, so the powers of presidents vary little over time within countries.⁷ Second, and by contrast, the bargaining power of the president's party is much more variable over time, changing at almost every parliamentary election. Assessing both static and variable channels of presidential influence in this way produces a more complete account of how presidents effect the government formation process.

DATA AND METHODS

I test these hypotheses using data from 26 European countries. The data are taken from the *European Representative Democracy Data Archive* (ERDDA) (Andersson et al., 2014) and covers the period from 1945 (or the onset of democracy) to 2011. 12 countries are identified as semi-presidential regimes according to Elgie's (1999) commonly-used definition, meaning that there is a directly elected president and a cabinet that is responsible to parliament.⁸ This is chosen over Duverger's (1980) classic definition as the criterion that the president must also possess considerable powers is considered to be too open to interpretation, thus making it more contentious to operationally define. Countries in which the president is elected by the assembly may also be considered semi-presidential by some definitions (Tavits, 2008) but the logic of my argument rests partially on the popular electoral mandate of a president.

In total, there are 565 cabinet formation processes in the dataset. However, this full sample is used only to test the simple effect of semi-presidentialism. The hypotheses that I have specified refer specifically to the effect of semi-presidentialism conditional on presidential powers and the bargaining power of the president's party. It is therefore more appropriate to exclude

countries from the analysis which have a monarchical head of state who is constitutionally bound to be apolitical. The hypotheses are tested on a sample of countries which have directly and indirectly-elected presidential heads of state, giving a total of 364 cases of cabinet formation processes.

The dependent variable is the duration of the cabinet formation process in days. This is measured from the date of the end of the previous government to the date that the new government takes office or passes a vote of investiture in the legislature. The end of the previous government occurs when a general election is held, the party composition of the cabinet changes, or the prime minister resigns. Diermeier and Van Roozendaal (1998) and Golder (2010) both highlight the distinction between the length of the bargaining process as a whole and the duration of a discrete round of bargaining that may or may not produce a viable cabinet. In this research, I specifically address the duration of the whole bargaining process as I am concerned with explaining the length of time it takes to form a cabinet that successfully takes office which I believe is of greater substantive interest. Furthermore, it is difficult to accurately identify when individual bargaining rounds may begin or end, particularly as informal negotiations between actors often take place. Attempting to observe discrete rounds of negotiations is therefore likely to produce a lot of noise in the data.

I have added three variables to the dataset to test my hypotheses. The first is an indicator which takes a value of 1 if there is a directly elected president in a country and 0 if there is some other type of head of state. This variable is coded per the Elgie definition set out above. The second is a measure of presidents' constitutional powers. I use Metcalf's (2000) revision of Shugart and Carey's (1992) index of presidential powers with the data taken from Tavits (2008). This is technically an additive ordinal index however, as already discussed, the precise powers of the president are substitutable and it is my contention that the president's authority and legitimacy to act increases along with the sum of their overall powers. As such, this index can serve as an

interval measure of presidential powers as it has been used in prior research (e.g. Amorim Neto & Strøm, 2006; Schleiter & Morgan-Jones, 2010; Tavits, 2008). However, in the analysis I also run additional models using the sub-indices of legislative and non-legislative powers to add granularity to the discussion. The third variable is used to examine the bargaining power of the president's party which is an indicator of how likely it is to be included in a governing proposal. To measure this, I use the Shapley-Shubik index (SSI) which provides an estimate of the number of times an actor is pivotal in a coalition, meaning that the actor turns a losing coalition into a winning coalition (Shapley & Shubik, 1954). The SSI is a commonly-used measure of bargaining power in weighted voting scenarios (e.g. Laver & Benoit, 2003; Pedersen, 2010; Warwick & Druckman, 2006). The index runs from 0 to 1 with higher values indicating greater bargaining power.⁹ The party affiliation of the president is collected from various archival sources including the *European Journal of Political Research* Political Data Yearbook's and the *European Election Database*.¹⁰

Several control variables are added to the models to take into account the findings from previous research. If the bargaining process takes place following an election, it is assumed that uncertainty will be higher as party leaders have less information regarding what is an acceptable proposition to one another. Uncertainty may be reduced during a parliamentary term as day-to-day interaction in the legislature will reveal more about each party's preferences. I therefore include a binary indicator of whether the bargaining process takes place after an election (1) or during a parliamentary term (0) with the expectation that post-election bargaining will be longer. Following previous research (Diermeier & van Roozendaal, 1998; Golder, 2010; Martin & Vanberg, 2003), two measures of bargaining environment complexity are included in the analysis. The first is the effective number of parliamentary parties. A more fragmented legislature should theoretically make it more difficult to form a government with a greater number of players in the bargaining process. The effective number of parties is calculated according to Laasko and Taagepera's (1979) formula. The second measure is the

ideological polarization of the legislature. Golder (2010) argues that higher levels of polarization in the legislature increases the likelihood that a formateur will have to bargain with one or more parties that hold divergent preferences over a range of policy areas. The polarization measure used in this research is based on data from the *Manifesto Project Database* and is taken directly from the ERDDA dataset.

Institutional rules can also influence bargaining duration. In countries where a constructive vote of no-confidence is in operation it is required that the legislature has an alternative government ready to take office at the same time that the vote of no-confidence is passed thus leading to a curtailed government formation process. I control for this by including a variable which has a value of 1 for those countries that use a constructive vote of no-confidence and 0 for countries that do not. In some countries, the incumbent government is not required to leave office immediately and is instead given the first opportunity to try and form a new government. Diermeier and van Roozendaal (1998) state that this “continuation rule” should reduce the time taken to select a formateur and it allows the incumbent cabinet to start negotiations while still in office. Countries that operate a continuation rule are coded 1 in the dataset and all others coded 0. Previous research has included the need for a cabinet to pass an investiture vote in models of the duration of government formation. However, Golder (2010) argues that a more theoretically compelling distinction is that between formation processes characterized by positive parliamentarism and those characterized by negative parliamentarism. Under positive parliamentarism cabinets must obtain the support of a legislative majority to take office but under negative parliamentarism the cabinet must only ensure that a parliamentary majority does not vote against the cabinet. Government formation should therefore be shorter under negative parliamentarism. Countries are coded 1 where positive parliamentarism is present and 0 where negative parliamentarism prevails.

A final control variable is the occurrence of a majority situation in parliament. One would expect that when a single party controls a legislative majority on its own then government formation would be more straightforward. However, as Golder (2010) notes, this does not mean a single party majority government is inevitable; surplus majority governments are not uncommon. Furthermore, even when a single party does take office, there may be some time before ministerial portfolios are allocated within the party. A majority situation in the cabinet formation process is coded 1; the absence of a majority situation is coded 0. Descriptive statistics for all variables can be found in the appendix.

Method

As the dependent variable in this research is the duration of the cabinet formation process, a survival time model is the most appropriate mode of assessment. I use a semi-parametric Cox proportional hazards model which does not require researchers to make any assumptions about the baseline hazard function. It is therefore less demanding of the data than parametric models. The Cox model provides estimates for covariates but not directly for the baseline hazard function, $h_0(t)$, although both a survivor and cumulative hazard function can be recovered. The general model used in this research is specified as:

$$h(t) = h_0(t) \exp(\beta_1 \text{Semipresidential} + \beta_2 \text{Presidential powers} + \beta_3 \text{SSI} + \beta_4 \text{Postelection} \\ + \beta_5 \text{Effective number of parties} + \beta_6 \text{Polarization} \\ + \beta_7 \text{Constructive vote of no confidence} + \beta_8 \text{Positive parliamentarism} \\ + \beta_9 \text{Majority situation} + \beta_{10} \text{Continuation} + \beta_{11} \text{Semi pres X Pres powers} \\ + \beta_{12} \text{Semi pres X SSI} + \beta_{13} \text{Pres powers X SSI})$$

All models are estimated using robust standard errors (Lin & Wei, 1989). All government formation processes in this dataset end in the formation of a cabinet so there is no need to censor the data. Tests of the proportional hazards assumption using scaled Schoenfeld residuals show evidence of non-proportionality in every model in Table 1, indicating that the effect of some variables on the hazard rate varies over time. I use the most common solution for

violations of the proportional hazards assumption which is to interact the offending variables with the natural logarithm of the dependent variable (Box-Steffensmeier & Zorn, 2001).

RESULTS

Figure 1 shows the mean duration of the government formation process by country. Average duration varies considerably between countries, from just over five days in France and Greece up to 82 days in the Netherlands. Distinct patterns between regimes are not immediately clear though on average, government formation takes three days longer in semi-presidential systems. While average government formation time is not vastly different between semi-presidential and other regimes, it is noticeable that the standard deviation for semi-presidential systems is lower indicating that there is a greater spread of the data in parliamentary systems.¹¹ Furthermore, the maximum duration of government formation in semi-presidential systems in this data is 176 days compared to 272 days in parliamentary systems.

Figure 2 gives a clearer picture of the differences in government formation times between regimes. The hazard estimate in this instance is the likelihood of the government formation process concluding successfully on a given day. In semi-presidential regimes there is a much greater likelihood that government formation will end earlier in the bargaining process with a distinct increase in the hazard estimate between approximately 45 and 80 days compared to parliamentary regimes. There is also a noticeably longer tail to the hazard estimate of the government formation process in parliamentary systems which indicates there is a greater number of cases of prolonged coalition bargaining compared to semi-presidential regimes. The descriptive statistics therefore indicate that we can expect the cabinet formation process to be shorter in duration in semi-presidential regimes though only a more rigorous test of the data can tell us whether these differences between systems are important.

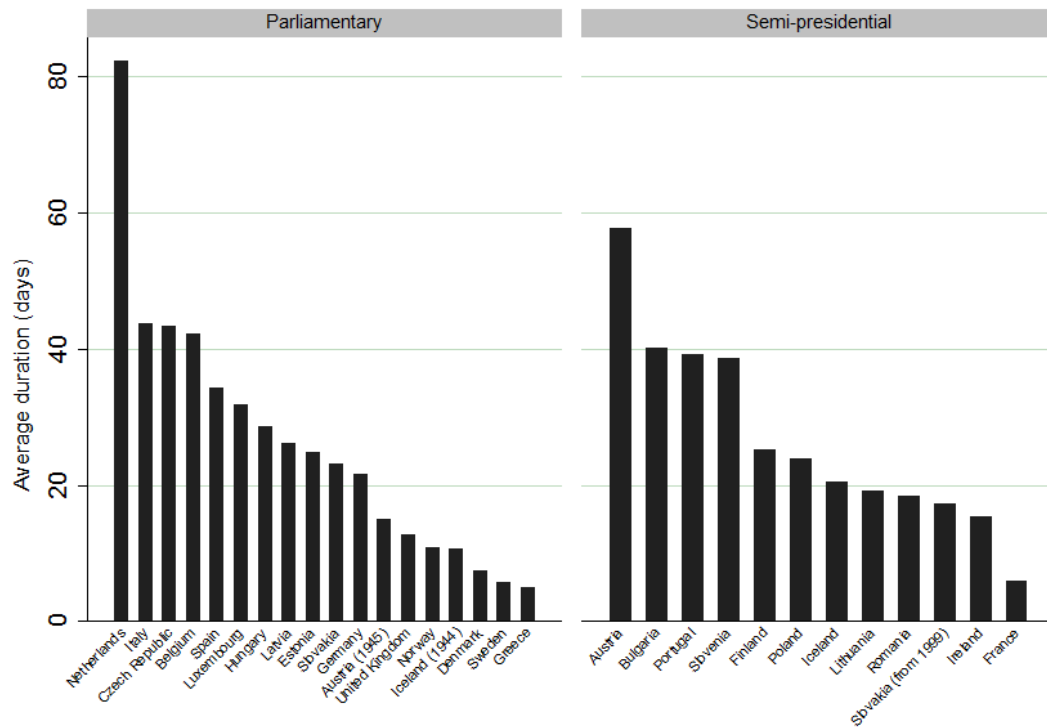


Figure 1. The duration of government formation in parliamentary and semi-presidential and political systems.

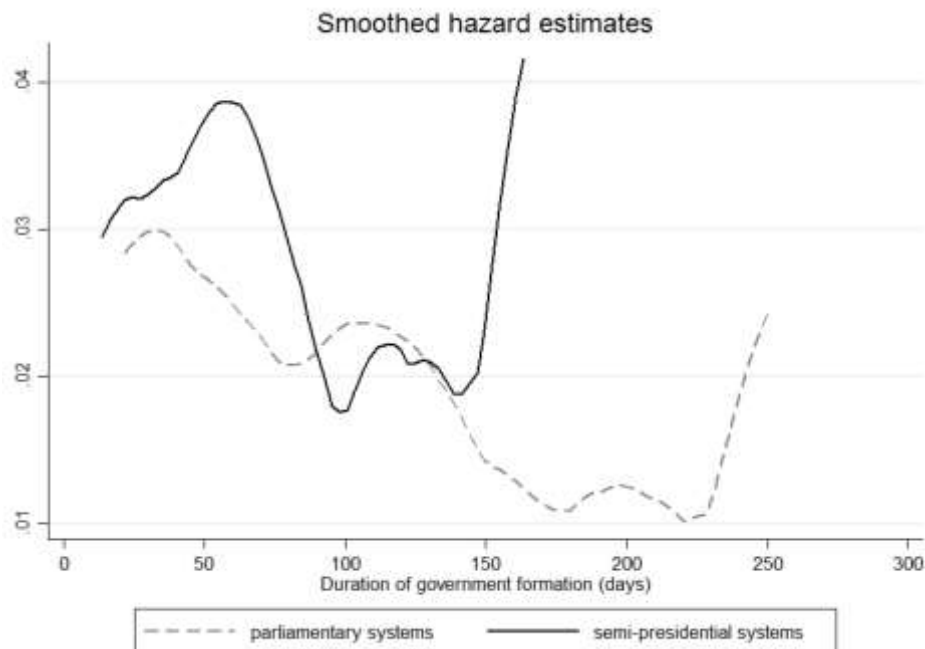


Figure 2: Smoothed hazard estimate of the duration of government formation by type of political system.

Table 1 contains the results of the proportional hazards models of cabinet bargaining duration. The entries in the table are hazard ratios which can be interpreted as the odds that cabinet bargaining will end on a given day.¹² Hazard ratios are assessed relative to a baseline of 1; values greater than 1 indicate an increased likelihood that bargaining will end and values of less than 1 suggest a decreased likelihood that government formation will conclude.

Model one estimates the effect of semi-presidentialism on the duration of government formation without the inclusion of the other specified independent variables. This is to establish the unconditional effect of *semi-presidentialism* for the full dataset which includes systems with a monarchical head of state. The results show that the government formation process is likely to end earlier in semi-presidential systems. The hazard ratio of 1.72 indicates that the likelihood that government formation will end on a given day is increased by 72 percent in semi-presidential systems. This result is important, but the more substantively interesting questions are how and when are presidents influential? When the *presidential powers* and *SSI* (bargaining power of the president's party) variables are added to the equation in model two the effect of semi-presidentialism is reduced; though it should also be noted that systems with monarchical heads of state are removed from these models including the Netherlands and Belgium which generally have longer government formation processes. While still indicating that government formation time is shorter in semi-presidential systems, the hazard ratio of this variable is now 1.31 and it is no longer statistically significant. However, both presidential powers and SSI are significant and associated with shorter government formation processes with hazard ratios of 1.05 and 2.13 respectively. These results indicate that semi-presidentialism alone is not enough to produce significantly shorter coalition bargaining periods. Instead, model two suggests that the effect of semi-presidentialism is conditional on other factors.

Table 1: Cox proportional hazards models of the duration of the government formation process

	(1) HR/(SE)	(2) HR/(SE)	(3) HR/(SE)	(4) HR/(SE)	(5) HR/(SE)	(6) HR/(SE)	(7) HR/(SE)
Semi presidential	1.724*** (0.202)	1.313 (0.201)	0.287*** (0.101)	0.555* (0.127)	0.238* (0.162)	0.380 (0.209)	1.175 (0.248)
Pres powers		1.054* (0.024)	0.919 (0.041)			0.905 (0.086)	1.048* (0.023)
SSI		2.131** (0.494)	0.533 (0.249)	0.550 (0.262)	0.631 (0.296)	1.911** (0.450)	0.730 (0.338)
Post-election	0.286*** (0.031)	0.152*** (0.033)	0.145*** (0.032)	0.145*** (0.032)	0.146*** (0.032)	0.146*** (0.033)	0.141*** (0.032)
ENP	0.889* (0.041)	0.888 (0.058)	0.887 (0.055)	0.906 (0.057)	0.874* (0.057)	0.884 (0.057)	0.845* (0.058)
Polarization	1.008 (0.005)	1.007 (0.006)	1.007 (0.006)	1.009 (0.006)	1.006 (0.006)	1.005 (0.006)	1.011 (0.006)
Constructive no-confidence	1.389* (0.204)	1.704*** (0.253)	1.771*** (0.253)	1.815*** (0.260)	1.557** (0.225)	1.719*** (0.254)	1.683** (0.269)
Positive parl.	1.278 (0.167)	0.999 (0.181)	0.995 (0.185)	0.809 (0.146)	1.133 (0.256)	0.982 (0.177)	1.016 (0.179)
Majority situation	1.129 (0.174)	1.417 (0.277)	1.242 (0.249)	1.255 (0.250)	1.136 (0.235)	1.434 (0.281)	1.302 (0.251)
Continuation	4.586*** (0.745)						
Semi pres X Pres powers			1.195*** (0.063)			1.242* (0.125)	
Semi pres X SSI			6.457*** (3.558)	5.835** (3.261)	5.575** (3.019)		3.694* (2.000)
Legislative powers				0.935 (0.043)			
Semi pres X Leg. powers				1.188** (0.067)			
Non-legislative powers					0.732 (0.134)		

Semi pres X Non-leg. powers					1.476 (0.295)		
Post-election X ln(Time)	1.077* (0.037)	1.359*** (0.092)	1.350*** (0.091)	1.354*** (0.092)	1.353*** (0.090)	1.383*** (0.098)	1.390*** (0.096)
ENP X ln(Time)	1.005 (0.011)	1.021 (0.016)	1.014 (0.015)	1.015 (0.015)	1.017 (0.016)	1.021 (0.016)	1.039* (0.018)
Semi pres X ln(Time)						1.111 (0.182)	0.819*** (0.041)
Pres power X ln(Time)						1.012 (0.029)	
Semi pres X Pres powers X ln(time)						0.974 (0.030)	
SSI X ln(Time)							0.826 (0.097)
Semi pres X SSI X ln(Time)							1.514** (0.199)
N	565	364	364	364	364	364	364
Log-likelihood	-2888.938	-1695.876	-1684.775	-1686.237	-1689.028	-1685.948	-1682.204
AIC	5797.877	3413.751	3395.550	3398.473	3404.055	3401.897	3394.408
BIC	5841.245	3456.620	3446.213	3449.136	3454.718	3460.354	3452.866

* p<0.05, ** p<0.01, *** p<0.001

Note: Entries in the table are hazard ratios (HR) with standard errors in parentheses.

To test the conditional effect of semi-presidentialism I specified two hypotheses. The first states that the government formation process would be shorter in systems where presidents have more constitutional power. The direct election of the president provides a foundation of legitimacy for them to intervene in the government formation process but this is augmented by their constitutional powers. These powers increase the authority and status of the president in the eyes of the electorate and other political actors. The interaction term *semi-pres. X pres. powers* in model three shows that where presidents are both powerful and directly elected, the likelihood that cabinet formation will end on a given day is increased by 20 percent. This result allows me to confirm hypothesis one (H1). Although tests of the proportional hazard assumption did not suggest that this conditional effect varies over time, I specified a further model to test this. Model six shows the result of a three-way interaction, *semi pres X pres powers X ln(Time)*. The coefficient is not statistically significant but the hazard ratio does indicate that the effect of powerful directly-elected presidents declines over time.

Returning to the main result of model three, the effect of increasing presidential powers is more clearly illustrated in Figure 3. This shows the simulated marginal effect on the hazard ratio of semi-presidentialism compared to parliamentary regimes, at different levels of presidential powers. Using simulations allows researchers to produce estimates of the uncertainty of quantities of interest, in this case, the marginal effect. Darker areas of the graph show the central 50 percent of simulations, lighter areas the remainder, and the dark line is the median value. All simulations are carried out using the simPH package in R (Gandrud, 2015).¹³ Figure 3 shows that the effect of semi-presidentialism increases as the president's constitutional powers increase. At the lowest level of presidential powers in this dataset which is a score of 2, the effect of semi-presidentialism on the hazard ratio is an increase of just 0.5 (50 percentage points). However, the marginal effect of directly-elected presidents that receive a score of 8 or above on the presidential powers index is an increase in the hazard ratio of at least 1.2 (120 percentage points), rising to 3 at the highest level of presidential powers (13). Approximately

44 percent of semi-presidential cases in this dataset receive a score of 8 or greater on the presidential powers index compared to just 3 percent of cases with indirectly elected presidents. These results provide further detail to the confirmation of H1.

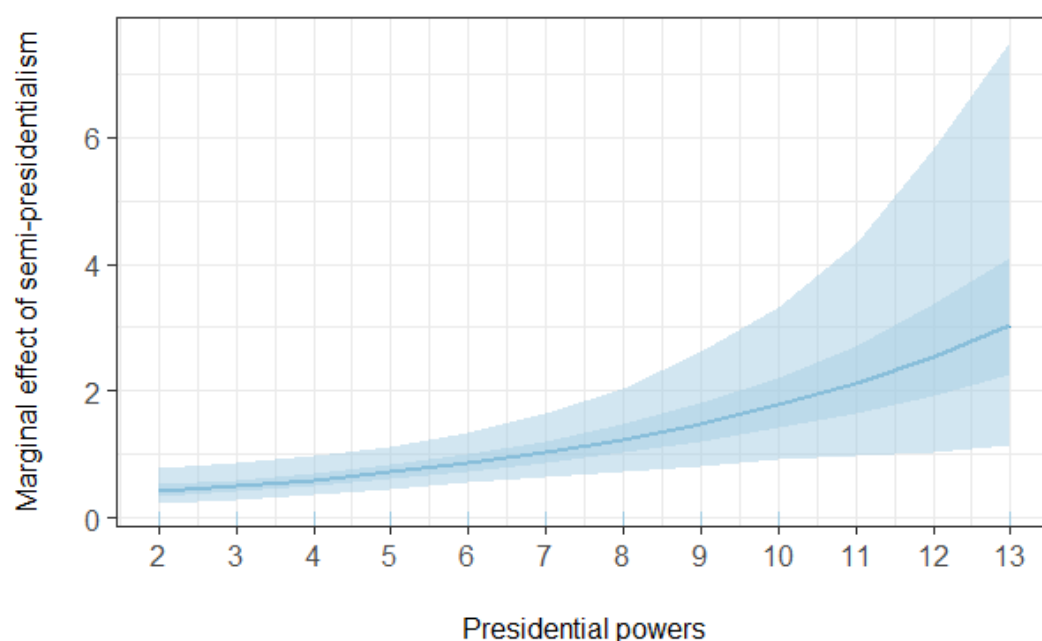


Figure 3: Simulated marginal effect of semi-presidentialism conditional on presidential powers. Note: Results are taken from model three of Table 1. Graph is based on 1,000 simulations.

The discussion of the first hypothesis suggested two causal mechanisms that could lead to reduced government formation time when presidents are more powerful. The first indicated that some presidents could directly intervene in the bargaining process using their non-legislative powers. The second outlined how rationally foresighted parties would act to propose a cabinet that is more likely to be able to fulfil its legislative agenda without interference from a president with strong legislative powers. I test separately the effect of legislative and non-legislative powers in models four and five. The interaction terms *semi pres X leg powers* and *semi pres X non-leg powers* both show that presidents with either greater legislative or non-legislative powers reduce the duration of the government formation process. The effect just fails to reach the conventional level of statistical significance in the case of *semi pres X non-leg powers* ($p=0.052$). However, this is evidence that legislative and non-legislative powers are, to some

extent, substitutable in explaining the influence of presidents on the duration of government formation. Though the evidence of the effect of presidents' aggregate constitutional powers is more emphatic.

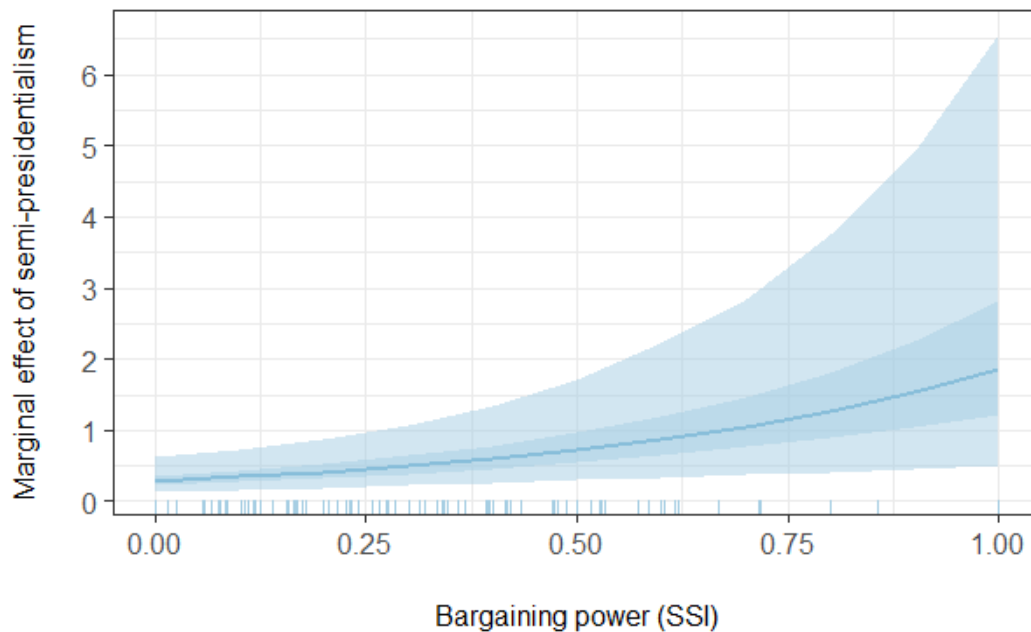


Figure 4: Simulated marginal effect of semi-presidentialism conditional on the bargaining power of the president's party.

Note: Results are taken from model three of Table 1. Graph is based on 1,000 simulations.

Model three also tests the second hypothesis (H2) which states that government formation will be a smoother process when the president's party holds a stronger bargaining position and is therefore more likely to be included in the proposed cabinet. The interaction term *semi-pres X SSI* is significant at the $p < .001$ level and the hazard ratio indicates that when the president's party holds greater bargaining power, the likelihood that government formation will end earlier increases by over 600 percent. Poland provides a demonstration of this finding. The first government to form after the inauguration of the SLD president, Aleksander Kwaśniewski, was an SLD-PSL coalition that took just 12 days to negotiate in 1996. The SLD's bargaining power was 0.41 on the SSI at the time, meaning that it was a pivotal player in around 41 percent of possible coalitions. Following the 1997 general election, the SLD's bargaining power was reduced to 0.22 and government formation lasted 40 days. As with H1, I specified a further

model to explore how the conditional effect of semi-presidentialism and the bargaining power of their party varies over time. Tests of the proportional hazards assumption did not suggest this would be the case. However, the result for *semi pres X SSI X ln(Time)* in model seven is statistically significant. It indicates that the hypothesized effect increases over time. It is uncertain why this is the case, though one could argue that the bargaining position of the president's party will become stronger as time goes on and uncertainty about the preferences of the president and their party erodes. Other actors in the process begin to understand that an acceptable governing proposal will include the president's party.

Figure 4 illustrates the conditional relationship between semi-presidentialism and the bargaining power of the president's party in the legislature. The marginal effect of a semi-presidential system compared to a parliamentary regime, and accompanying levels of uncertainty, are once again estimated via simulation. The marginal effect of semi-presidentialism clearly increases along with the bargaining power of the president's party so, as the party holds a stronger bargaining position in the legislature, the duration of government formation is reduced. There is, as may be expected, a greater level of uncertainty about this effect at the highest end of the bargaining power scale though even for cases above 0.75 on the SSI, the central 50 percent of simulations are relatively condensed as indicated by the dark ribbon in Figure 4. Overall, H2 is confirmed by the data which offers support for the argument that the partisanship of the president is important in semi-presidential regimes. This provides a challenge to those who argue that presidents are neutral arbiters of the constitution rather than party political actors.

Table 2: A posteriori model of the government formation process

	(8)
	HR/(SE)
Semi-presidential	1.002 (0.192)
Pres powers	1.046 (0.025)
SSI	2.919*** (0.781)
Pres party in cabinet	0.568** (0.103)
Post-election	0.151*** (0.033)
ENP	0.882 (0.058)
Polarization	1.009 (0.006)
Constructive no-confidence	1.703*** (0.272)
Positive parl.	0.990 (0.180)
Majority situation	1.298 (0.263)
Semipres X Pres party in cabinet	1.632* (0.363)
Post-election X ln(Time)	1.346*** (0.088)
ENP X ln(Time)	1.017 (0.016)
N	364
Log-likelihood	-1691.468
AIC	3408.937
BIC	3459.600

* p<0.05, ** p<0.01, *** p<0.001

Note: Entries in the table are hazard ratios (HR) with standard errors in parentheses.

To explore H2 further, I specified a model of the duration of coalition bargaining that includes whether the president's party was included in the final cabinet. The model in Table 2 cannot be used for predictive purposes as the composition of the cabinet is not known *a priori*. However, it is still informative as it can help to explain bargaining duration *a posteriori*, though one should proceed with caution when drawing conclusions on the basis of this evidence as selection bias could be an issue whenever variables are used that are based on characteristics of the final cabinet (Golder, 2010). With that caveat in mind, the result for the interaction term *semi pres X*

pres party in the cabinet indicates that the duration of government formation is reduced when the president's party is included in the final governing proposal. This adds further weight to the contention that the bargaining process is more straightforward, and duration reduced, when the president's party holds greater prospects for success.

Some of the control variables included in Table 1 are also worth highlighting. In accordance with the findings of previous literature, *post-election* cabinet formation processes are significantly longer than those that take place during a parliamentary term which lends weight to the uncertainty hypothesis of Diermeier and van Roozendaal (1998). The complexity of the bargaining environment also appears to influence cabinet bargaining with more fragmented legislatures leading to longer formation processes as indicated by the *ENP* variable, though this is only significant in models one and five. However, the interactions of both *post-election X ln(Time)* and *ENP X ln(Time)* show that the influence of uncertainty and complexity declines over time as actors reveal more information about their bargaining positions and each becomes more aware of what is an acceptable cabinet proposal to other actors. The existence of a constructive vote of no-confidence serves to reduce the duration of government formation, increasing the likelihood that the process will end by around 77 percent on a given day (see model three). Finally, the presence of a continuation rule significantly reduces the duration of government formation though it should be noted that no semi-presidential regimes have such a rule.

DO SPECIFIC COUNTRIES DRIVE THE RESULTS?

The results in this article provide strong support for the argument that the president's legitimacy to act and partisan politics produce shorter cabinet bargaining processes in semi-presidential systems. But are these results driven by particular countries in which presidents have demonstrated greater willingness to intervene in government formation? Could they also

be influenced by certain parliamentary systems in which long bargaining periods are the norm?

To test the robustness of the results I re-ran model three from Table 1, which is the specification that forms the basis for most of my conclusions, with certain countries excluded.

Table 3: Robustness tests of the duration of the government formation process

	(9) Exclude Austria HR/(SE)	(10) Exclude France HR/(SE)	(11) Exclude France and Finland HR/(SE)	(12) Exclude Netherlands HR/(SE)
Semi-presidential	0.394** (0.141)	0.312** (0.113)	0.317** (0.113)	1.470** (0.209)
Semi pres X Pres powers	1.149* (0.062)	1.186** (0.064)	1.177** (0.062)	
Semi pres X SSI	7.106*** (4.054)	6.144** (3.586)	6.413** (3.685)	
N	341	336	287	540
Log-likelihood	-1560.555	-1535.341	-1267.680	-2753.081
AIC	3147.110	3096.682	2561.359	5526.162
BIC	3196.924	3146.304	2608.933	5569.078

* p<0.05, ** p<0.01, *** p<0.001

Note: Entries in the table are hazard ratios (HR) with standard errors in parentheses.

The results in Table 3 show only the hazard ratios for the variables of interest for the reduced samples though each model contains the full specification in table one.¹⁴ Model nine shows the results for the sample excluding Austria. The Austrian president is very powerful, possessing the right to unilaterally appoint the prime minister and dismiss the legislature. However, by convention, these powers are rarely exercised and Austria is therefore a heavily parliamentarized semi-presidential system (Samuels & Shugart, 2010). Austria is also the semi-presidential country with the longest average duration of government formation (see Figure 1) so the results should not be sensitive to its exclusion and we may even expect the substantive effect of the independent variables to increase which is precisely what happens in the case of *semi pres. X SSI*.

I then excluded France from the sample. France is perhaps the most studied case of semi-presidentialism and is often seen as the European country with the most prominent president. One may therefore expect that France has the potential to unduly influence the results of this study. Model ten shows that this is not the case with all hazard ratios of interest remaining significant and in the expected direction when France is removed from the sample. Although De Winter and Dumont did not analyse the relationship between semi-presidentialism and the duration of government formation, they did include it as a control variable and attributed its effect to the influence of presidents in France and Finland (De Winter & Dumont, 2008, p 151). This is a reasonable assumption given the prominence of French presidents and the power wielded by Finnish presidents until around the late 1970s (Jih-Wen, 2011; Nousiainen, 2001). The results in model eleven show that my explanatory variables are not sensitive to the exclusion of both France and Finland from the sample. Finally, in model twelve I test whether the higher than average duration of government formation in one parliamentary regime – the Netherlands – influences the effect of the *semi-presidential* variable. Excluding the Netherlands from the sample sees the hazard ratio for this variable reduce from 1.72 in table one (model one) to 1.47 though it remains statistically significant.

Overall, the results of this research are not driven by the inclusion of outlier countries in which presidents assume disproportionate influence over government formation. Instead, these tests show that presidential influence over the duration of government formation is a systemic feature of semi-presidential democracies.

CONCLUSION

In this article, I have examined the influence of presidents on the duration of government formation in semi-presidential democracies and shed light on the nature of executive-legislative relations in such systems. While it may have been expected that presidents, as prominent

political figures on both the domestic and international stages, would have some part to play during government formation, the literature to date has overlooked this and failed to offer a theoretical account of the president's role. I build on the complexity and uncertainty models of previous literature to offer a new theoretical approach to understanding the effect of presidential intervention in the government formation process and the circumstances under which this influence is likely to be exercised.

Presidential influence can be explained by a combination of the president's legitimacy to act in government formation and partisan politics. The president's legitimacy to act derives partly from their popular electoral mandate but it is conditional on the scale and scope of their constitutional powers which increases their authority in the eyes of voters and other political actors in the system. These powers may be non-legislative, allowing the president to directly intervene in government formation, or they may be legislative. Presidents with extensive legislative powers can impede a government's legislative agenda and destabilize the cabinet. Thus, where presidents are more powerful the complexity of the bargaining process is reduced by limiting the range of governing proposals to those that will be considered more acceptable to the president, thus forestalling the need to exercise their powers.

Together with the legitimacy to act, the president's partisanship also reduces the duration of coalition bargaining. With the presidentialization of political parties the level of uncertainty in the bargaining process is lower as the preferences of the president and their party overlap. Presidents therefore have a major incentive to see their parties become part of the cabinet and thus limit the prospects of a conflictual cohabitation. This becomes increasingly likely if the president's party holds a stronger bargaining position in the legislature. As the bargaining power of the president's party increases and it becomes a pivotal player in a greater proportion of potential cabinets. Bargaining becomes less complex as any viable cabinet will contain the

president's party and is more likely to be acceptable to the president. Therefore, the partisanship of the president also results in a shorter government formation process.

The empirical results provide support for this argument. Using a sample of European parliamentary and semi-presidential democracies I show that the duration of the government formation process is significantly shorter in semi-presidential systems in which the president has greater constitutional powers, and when the president's party has greater bargaining power in the government formation process. The duration of government formation is also shorter when the president's party is included in the final cabinet. Robustness tests demonstrate that these results are not driven by potentially influential countries (e.g. France and Finland).

These empirical results point to the systemic influence of semi-presidentialism on the duration of government formation. This study therefore adds to our understanding of what drives the bargaining process, augmenting the complexity and uncertainty driven explanations of previous research. Furthermore, the results here contribute to our understanding of the effects of semi-presidentialism as a regime type. To date, research into the influence of presidents on government formation have focussed on ministerial appointments (Amorim Neto & Strøm, 2006; Schleiter & Morgan-Jones, 2010), so this study represents the first research that concentrates on the bargaining process itself. Crucially, and in contrast to study of ministerial appointments, the results of this research show that presidents do act in a partisan manner in semi-presidential system as suggested by Samuels and Shugart (2010) and Grossman and Sauger (2009). More broadly, this research demonstrates that the extent of presidential influence in dual-executive systems extends beyond what the constitution may prescribe. This is particularly the case in terms of coalition bargaining and government formation.

APPENDIX

Variable	ERDDA variable name	Observations	Mean	Std. Dev.	Min	Max
Bargaining duration (days)	v600e	565	27.42	35.41	0.01	272
Semi-presidential		565	0.39	0.49	0	1
Presidential powers		365	7.03	2.93	2	13
SSI		364	0.28	0.28	0	1
Legislative powers		365	2.61	2.10	0	8
Non-legislative powers		365	4.43	1.79	1	8
Post-election	v303e	565	0.55	0.50	0	1
ENO	v309e	565	3.91	1.35	1.99	10.47
Polarization	v407e	565	16.52	9.51	0.01	48.75
Constructive no-confidence	v508e	565	0.13	0.33	0	1
Positive parl.	v505e	565	0.51	0.50	0	1
Majority situation	v314e*	565	0.15	0.35	0	1
Continuation		565	0.20	0.40	0	1

* The coding of this variable has been inverted from the original coding in the ERDDA dataset to ease interpretation

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¹ This was the second prolonged period of government formation in the space of a few years in Belgium. In 2007–08 government formation lasted 196 days.

² This refers to the date that the Socialist government led by Antonio Costa took office. The government of the rightist Portugal Ahead forces, led by Pedro Passos Coelho failed to get its programme approved by the legislature within 10 days of appointment in October 2015 and so did not take office.

³ Nečas had been removed from office following charges of corruption and abuse of power that were levelled at his chief of staff, Jana Nagyová.

⁴ See Doyle and Elgie (2014) for a review of alternative indices of presidential power.

⁵ Note that conflict between presidents and prime ministers of the same party is not unheard-of (Sedelius & Mashtaler, 2013).

⁶ An 'open presidency' occurs when a president temporarily moves the seat of office to a different region in a kind of political tour. These gain a great deal of media attention, thus allowing the president greater capacity to frame political debate.

⁷ For a list of dates of constitutional changes pertaining to presidential power see Tavits (2008, p 53).

⁸ The countries are Austria, Bulgaria, Finland, France, Iceland, Ireland, Lithuania, Poland, Portugal, Romania, Slovakia, and Slovenia. The Czech Republic also has a directly elected president but the first election was held in 2013 which is outside of the coverage of the data in this research.

⁹ To calculate the SSI value for each party in the legislature I used seat share data taken from the ParlGov Database (Döring & Manow, 2016). All parties that held seats in a legislature receive a SSI value. Deputies that are categorized as 'other' – usually those without a party affiliation – in the ParlGov Database are treated as a single entity.

¹⁰ The European Election Database can be found at http://www.nsd.uib.no/european_election_database/about/ [last accessed: 2nd September 2016]

¹¹ See the appendix for a table of descriptive statistics for the dependent and independent variables.

¹² Standard errors in the tables are the errors of the exponentiated coefficients. Tables containing standard coefficients and accompanying standard errors are available from the author on request.

¹³ For simulation methods for proportional hazards models in Stata see Licht (2011).

¹⁴ The full tables are available in the supplementary information.